BUILDING STANDARDS COMMITTEE

Division of the State Architect Advisory Board Minutes of Meeting Wednesday, April 21, 2004

California Community Colleges Building 1102 Q Street, 3rd Floor, Conference Rooms 3B and 3C Sacramento, California

DSA Staff Present

Howard "Chip" Smith

Richard Conrad

Dan Levernier

Elena Tarailo

Others Present
Kurt Cooknick, AIA
Larry Foley, Trus Joist
Leslie R. Haberek, SFM

Patti Habel, ICC

John Henry, ICC

Bob Reimer, CBIA

Matt Wheeler, CALBO

John Vester

Stephan Castellanos, State Architect

Committee Members Present

Thomas Shih, Chair Gale Bate, Vice Chair Bob Dyson Kennith Hall Pete Peterson Art Ross Lowell Shields David Smith

Committee Members Absent

Paul Beyl Mike Modugno Jim Ward Chris Wills

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Call to Order and Introductions

Committee Chair Thomas Shih called the meeting to order at 10:05 a.m. and welcomed all participants. Committee members, staff, and guests introduced themselves.

Review Minutes from November 6, 2003 Building Standards Commission Meeting A motion was made and seconded to approve the minutes of the November 6, 2003 meeting as submitted. The motion was carried unanimously.

Stakeholder Review Process for NFPA Code

Mr. Howard "Chip" Smith observed that Agenda Item VI, to be covered later in the agenda, addresses the next steps in the code adoption process, including stakeholder review. He drew attention to the large flow chart of the work plan developed by the staff. He also distributed copies of "Stakeholder Review of Draft Amendments and Rationale for the Next California Building Code," document which summarizes the components of the stakeholder review process.

Mr. Smith said the goals of the stakeholder review phase are to develop a draft stakeholder review process for the NFPA 5000 amendment work, and to obtain endorsement of the process from the DSA Advisory Board. He noted that DSA's current stakeholder process is informal, but extensive work entailed in this code amendment process necessitates a more clearly defined formal process. Mr. Smith explained that stakeholder review is mandated by law to provide a public forum, and to help avoid unnecessary comments during formal rulemaking, which can encumber the process.

Mr. Smith reviewed the key components of DSA's work plan. He drew attention to the

planning phase, the code development phase, stakeholder review, and rulemaking. He noted stakeholder review begins during the very first phase, so it became apparent to the staff that DSA needed to develop a process to ensure consensus and public vetting of all amendments and code provisions.

Mr. Shih said he understood that Housing and Community Development (HCD) already drafted proposed amendments, but theirs pertain to the International Residential Code. Mr. Bob Reimer of the California Building Industry Association (CBIA) stated that HCD will conduct a kickoff workshop on the initial draft amendment package soon.

Mr. Smith said that at present, DSA staff envisions a seven- or eight-month stakeholder review process for the draft amendments, with the first step being DSA Advisory Board review. The document would then be circulated to stakeholders in DSA's data base and also to state agencies for their input, with the Advisory Board approving the final version of its amendment package.

Mr. Smith reported that NFPA representatives reviewed work plan developed by DSA staff and suggested having state agencies do a sequential process of reviewing amendments and provide electronic posting of the documents on their respective websites. He said NFPA would like to see the stakeholder review periods compressed in order to expedite the entire process. Mr. Smith noted staff believes electronic posting is feasible, but the concept of sequential review needs further analysis.

Mr. Smith provided copies of the names in the mailing database maintained by DSA, containing approximately 300 entries. He said people wishing to make changes or additions should submit them to Mr. John Vester.

Ms. Leslie Haberek, State Fire Marshal, asked if DSA was willing to share its mailing list, and Mr. Smith volunteered to provide the information. He advocated development of a coordinated plan among state agencies.

Mr. Smith reviewed the considerations identified by the staff and welcomed committee input. He asked whether the full DSA Advisory Board should review the proposals before they are disseminated statewide. He noted the staff identified a proposed process, starting with an input form, posting of code proposals online, receiving and compiling stakeholder input and staff analysis, approval by the Advisory Board, and finally, a recommendation from the Advisory Board to the State Architect.

Mr. Art Ross asked how State Architect Steve Castellanos and Board Chair Lowell Shields envision the role of the Advisory Board and the committee in the stakeholder review process.

Mr. Castellanos commented that the Advisory Board's role is two-fold: Advisory, consisting primarily of responding and providing input on completed staff work; and a convener, to bring members of the public and stakeholders together to provide input to DSA. Mr. Castellanos recommended that the Board assist by holding public hearings, and then work with the staff to determine whether the comments and suggestions have merit.

Mr. Lowell Shields agreed with Mr. Castellanos' description of the Board's role. He encouraged the State Architect to use the Board to provide opinions and advice on issues assigned to it. He noted the Board can serve a useful function in gathering and

evaluating public input.

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 Mr. Gale Bate expressed support for developing a more formal stakeholder review process to assist with the code adoption and amendment process. He commented that adoption of the new model code is a huge undertaking for DSA and the other state agencies, so organizing and coordinating the process will be very important.

Mr. Reimer expressed CBIA's strong support for the process being developed by the DSA staff. He said the private sector has been using a similar model. Mr. Reimer noted the stakeholder review process provides a way of dealing with an enormous workload in a thoughtful and efficient manner.

Mr. Reimer expressed concern about the length of the California amendments, estimated to take at least 300 pages. He said he heard that NFPA recently submitted 51 pages of inserts for Chapter 41, which was previously a one-page section. He noted NFPA is doing a complete rewrite of nine other chapters, and OSHPD indicated eleven other chapters will be substantially updated.

Looking at the work plan flow chart, Mr. Reimer drew attention to Phase 5, calling for stakeholder review of the code provisions. He questioned whether there was adequate time for state agencies to respond to the extraordinarily heavy workload of proposals coming out of the committees. He also cautioned that the time allotted for Phase VII also seems insufficient for 300 pages of new code, plus state agency amendments.

Mr. Smith noted the proposed time frames may need to be extended, depending on how much time each phase takes.

Mr. Bob Dyson commended Mr. Smith and DSA staff for their work in planning the code adoption process. He suggested it might be more efficient to use the Building Standards Committee, rather than the DSA Advisory Board, as the vehicle for receiving and evaluating stakeholder input. He also recommended seeking legal input on copyright issues before making any proposals public.

Mr. Ross expressed concern that the NFPA provisions are being developed by a single firm without a consensus process. He strongly recommended involving stakeholders in the development of these important state policy considerations.

Mr. Ross made a motion, seconded by Mr. Hall, that the committee express its concern that state policy, in the form of draft NFPA provisions, are being developed by a single entity, the consultant firm hired by NFPA, outside the normal consensus process for code development work.

Mr. Dyson agreed, and commented that the same concern applies to the state's adoption of a model code. He noted that Building Standards Commission is likely to adopt the code as presented by NFPA, leaving many local building departments and small communities without the ability to rewrite amendments.

Mr. Bate recommended that the committee convey its concerns to the DSA Advisory Board, and it will be up to the Board to determine if the concern should be passed along to the State Architect.

The motion was carried unanimously.

Mr. Shields recommended focusing on how the committee and the DSA Advisory Board can assist DSA in the next steps in the process. He said he envisioned the Board's primary role as facilitating a public forum.

Mr. Smith noted there are some controversial provisions where DSA will be called upon to a make a decision, and the staff would benefit from the Board's review and input on those issues. For example, he noted that in the 2004 update, the staff will propose the repeal of the 1991 edition wood design standard and the adoption of the 2001 standard. However, if DSA is the only state agency making that change, designers would have to deal with different standards for different projects. Mr. Smith added that consensus seems to be developing in support of the 2001 standards because copies of the 1991 version are no longer available to those that work in the field.

Mr. Ross commented that the state should adopt the most current versions of code whenever possible.

Mr. Smith said another example of an issue that will be appropriate for Board and committee input is the proposal for reducing continuous inspection of glu lam beam fabrication.

Mr. Shields questioned whether DSA will seek the opinion of Board members regarding which standard to adopt, or whether the Board should serve as a facilitator of a public forum to provide input on the issues. Mr. Smith and Mr. Castellanos responded that both types of input would be beneficial.

Mr. Richard Conrad noted that when presenting an issue to the Board, the staff normally articulates what it considers to be an appropriate solution, and then seeks input by way of endorsement or modification of the staff's proposal from the Board and other stakeholders. He said the Board's guidance will be particularly helpful as DSA deals with controversial issues.

Committee members discussed the extent to which the Advisory Board will be involved in public hearings.

Mr. Smith stated that DSA will look to the Board and its committees for advice on controversial issues, both technical and fiscal. Committee members noted the Board's highest priority should be to serve school occupants and schools.

Mr. Smith stated that DSA requested NFPA authorization to publish and duplicate all code sections, so staff remains hopeful the copyright issues will be resolved soon.

Mr. Chip Smith said the staff plans to update the current code to the extent possible with no major revisions. Mr. Hall asked if the revisions would be reviewed by the committee before they are finalized, and Mr. Smith pointed out the revisions will be reviewed during a later agenda item.

Ms. Haberek observed that the "annual" code cycle has actually extended to about 18 months. She said that by the time the Building Standards Commission adopts the annual cycle package, the state will be moving to a completely different code. She questioned how the California amendments will be incorporated into the new code.

Mr. * noted the process for adopting the model code is not going well at present, and significant revisions are likely to occur within the next five or six months.

Mr. Bate commented that the state will be fortunate if the provisions eventually adopted in 2006 are not two editions behind the model code. He recommended focusing on the "annual" cycles for the time being, and Mr. Smith noted the staff concurs with this method.

Ms. Patti Habel, ICC noted that DSA has formally requested permission to duplicate certain code sections, and it appears the ICC intends to fully protect its copyrights.

Mr. Smith said the next step in the stakeholder review process will be for DSA staff to draft a proposed process for the committee's review and endorsement at the next committee meeting.

Mr. Bate emphasized the need to gain concurrence from the other state agencies and suggested the committee review the draft following the review by other state agencies.

Mr. Dyson asked if the DSA staff responsible for drafting the code provisions are obtaining input from the outside. Mr. Smith responded that four work groups of state agency staff people have been assembled to work with NFPA and its consultants. He said the NFPA consultant is developing drafts, which are reviewed by the work groups prior to presenting them to the committee.

Mr. Bate made a motion, seconded by Mr. Dyson, to approve the stakeholder review process proposed by DSA staff.

Mr. Smith clarified that DSA staff intends to draft a proposed process for the stakeholder review phase. He said the stakeholder input would be gathered statewide, and would consist of a process by which advice on technical, fiscal, economic, and legal impacts would be gathered. He noted DSA plans to develop a stakeholder input form, and have it posted on the DSA website so the information can be disseminated electronically, and compile the input received to identify key issues and areas of controversy. At some point, it is proposed that the DSA Advisory Board would hold public hearings for purposes of receiving public testimony and comments, and then formulate a formal recommendation to the State Architect. Mr. Smith proposed that the staff develop and provide the committee with a written document that describes the stakeholder review process.

Mr. Dyson suggested using the Building Standards Committee to review materials on certain controversial issues before public dissemination.

The motion was carried unanimously.

Mr. Ross expressed concern that DSA will be spending an inordinate amount of staff time working on the code adoption process. He recommended discussing the issue at the next Board meeting to ensure that DSA spends the necessary resources and manpower to deal with relevant issues in the development of the current code over the next few years.

Mr. Smith noted it is estimated that Phase II of the work plan, entitled development of draft amendments, will run through at least April of 2005. He stated that working to

meet the deadlines will impact other DSA work because at least 10 to 15 percent of DSA's staff will need to be assigned to code development, and more field work will be contracted out.

Mr. Ross made a motion, seconded by Mr. Bate, to express concern regarding whether DSA will be able to continue allocating sufficient resources to update the current code.

Mr. Shields commented that there is other work DSA needs to do besides code adoption, and he expressed concern about jeopardizing the staff's ability to handle the school construction work that is likely to materialize as a result of the last bond issue.

Mr. Bate said he shared Mr. Shields' concerns and emphasized the need to keep the code current in order to maintain and ensure a high level of safety for California's public schools.

Mr. Shields suggested amending the motion, adding "and include adequate support for DSA's policy funds and current activities". Mr. Ross and Mr. Bate accepted this amendment. The motion was carried unanimously.

At 11:45 a.m., the committee took a brief recess. Mr. Shih reconvened the meeting at 12:00 noon.

DSA 2004 Code Supplement

Mr. Shih noted the staff indicated earlier that DSA will be submitting proposed code changes to the Building Standards Commission in August. He asked Mr. Chip Smith to discuss the proposed changes in more detail.

Mr. Smith drew attention to the one-page handout entitled "Draft Plan for 2004 CBC Supplement Work." He noted the following agenda item, the 2003 Uniform Mechanical Code and Uniform Plumbing Code, will also be submitted as part of the 2004 annual cycle.

Mr. Smith reviewed the scope of the proposed amendments. He noted the most controversial modification pertains to revising the continuous inspection requirement for glu lam beam fabrication, and he drew attention to a separate handout on those provisions. He said other changes include repeal of the 1991 wood standards and adoption of the 2001 edition; allowing use of OSB as a "structural use panel"; updating concrete masonry unit manufacturing and testing standards, updating masonry grout/mortar standards, amending the language on foundation-structure connection to clarify its application, and a number of miscellaneous corrections.

Mr. Smith reviewed the proposed schedule and noted DSA needs to have its proposal ready for submittal to the Building Standards Commission by August 2, 2004. To meet that timeframe, Mr. Smith noted the proposed provisions must be finalized internally within DSA by mid-June. He said DSA's regional offices and other agencies are providing input.

Mr. Smith invited the Advisory Board's assistance in terms of recommendations or suggestions for code updates, providing a forum for stakeholder input to proposals, and providing a recommendation to the State Architect. He welcomed comments from the committee.

Mr. Shields asked when the code change package will be available in writing. Mr. Smith said he expected to see a document before June 1. Committee members noted the Advisory Board planned to meet in June. Mr. Smith recommended having a public meeting sometime before July 2004 if possible.

Mr. Ross observed that the agenda contains four bullet items: glu lam beams, structural sheathing, trusses, and waiving continuous inspection for certain types of wood beams. He clarified that the first and fourth item were actually the same issue.

Mr. Dyson commented that the APA proposal calls for larger glu lam beams. He asked whether the intent was raising the inspection threshold. Mr. Smith said he specifically asked APA for input. He noted there are two ways of approaching the code: specifying what is exempt, or specifying what is not exempt.

Mr. Larry Foley, Trus Joint, said his company manufactures glu lams and "parelams" in larger sizes. He noted there is an ANSI requirement that end joints in lamination be staggered in the catch areas, but there is also an exception. Some inspectors are not aware of the distinction, and many require staggering anyway. Mr. Foley stated that staggering is a difficult, continuous process, which makes work for DSA more challenging. He urged the committee to help clarify the staggering requirement.

Committee members discussed the glu lam issue in more detail.

Mr. Ross recommended consulting with the four regional managers and the DSA Advisory Board to create a mutually acceptable policy on glu lam beams.

Mr. Smith questioned whether having a trademark and a maximum size ensured any level of quality or safety in a glu lam. He expressed concern as it relates also to small shops and fabrication plants.

Mr. Ross asked if there have been any reports of glu lam beams breaking in schools. The committee members cited a few examples. Mr. Ross said he knew of many in the commercial industry. He recommended not allowing 6-3/4-inch beams. Mr. Ross suggested that the DSA Regional Managers could meet with him and Mr. Dyson to work out a proposal that would satisfy safety concerns regarding glu lams that could potentially, reduce fiscal impacts, and remain cost-effective.

Mr. Dan Levernier encouraged the committee to ask for input from DSA's regional managers. He recommended investigating the third-party inspection agency and their standards, and considering prefabricated steel joists and other products.

Mr. Shields asked about the possibility of scheduling a meeting between stakeholders and committee members to discuss this issue in more detail. Mr. Smith observed that another approach may be to first request input by the committee and professionals who are knowledgeable in this area.

Mr. Dyson pointed out the target date for submission to the Building Standards Commission is August 2, so any recommendation from the committee needs to come to the Advisory Board before then. Mr. Shih said the next meeting of Advisory Board is scheduled for June 18. Committee members discussed whether there would be time for the committee and staff to formulate a recommendation. They advocated holding a

public forum as part of that process.

Mr. Ross commented that the glu lam proposal was not acceptable in its current form. He expressed his opinion that there should be a higher standard for school construction than for buildings constructed under the California Building Code. He said he was not in favor of totally eliminating the inspection process for beams.

Mr. Pete Peterson noted the biggest concern for schools is having termite-proof beams.

Mr. Smith noted the moisture content standards specified on the second page of the handout may not be applicable to stock beams. He acknowledged that training of inspectors was an important issue.

Mr. Foley said the APA and AITC were the two inspection agencies, and he encouraged DSA to investigate both.

Mr. Smith recommended soliciting input from manufacturers, inspectors, accrediting agencies, Mr. Ross, and key members of the Advisory Board.

Mr. Ross encouraged the staff to look into the rationale behind the current code requirements.

Mr. Foley noted the previous ANSI standard did not deal with staggering end joints. Mr. Ross pointed out that as a result of some notable failures, DSA identified a manufacturing problem and adopted the end joint requirement. He objected to summarily dismissing any of these provisions without adequate background investigation.

Mr. Foley said the California Building Code references the ANSI A190 standard, which requires drawings to include end joint details. Mr. Dyson noted DSA requires designers to show how end joints will be staggered. Mr. Smith commented that the alternative would be proof-loading end joints.

Mr. Smith said next steps include a technical assessment of current standards and code, soliciting input from a variety of interested parties through a public forum, analyzing the comments, and making a proposal.

Mr. Smith welcomed direction as to whether the issue of glu lam beams should be addressed, and committee members encouraged the staff to draft appropriate provisions.

Mr. Smith invited committee members to submit their comments and suggestions regarding all issues included in this year's code adoption cycle. He said DSA's submittal will include the package submitted and withdrawn last year with some minor changes.

<u>Propose Adoption of 2003 Uniform Mechanical Code & Uniform Plumbing Code, including Fiscal Impact & Stakeholder Outreach</u>

Mr. Chip Smith directed the committee to Agenda Items IV and Part V which were versions of the provisions submitted last October to the Building Standards Committee which were subsequently withdrawn. He noted these packages will repeal the 2000 edition of the Mechanical and Plumbing Codes and adopt the 2003 editions, continuing

the current DSA amendments.

Mr. Smith said the staff anticipates submitting these provisions without many changes. He noted provisions pertaining to certain non-school applications were eliminated. He observed that the Mechanical Code package was fairly straightforward. Mr. Smith noted that the Plumbing Code package includes continuation of certain peculiar amendments the committee may wish to review. As examples he drew attention to provisions pertaining to personal service rooms and drinking fountains, and encouraged committee members to review and comment on the proposed language.

Mr. Bate asked how far along other state agencies were in transitioning to the next model code. He questioned the timing of when the Plumbing and Mechanical Codes are likely to be adopted. Mr. Smith responded that in the past, DSA tried to have all parts of Title 24 effective on the same date. He acknowledged there was a possibility that the Plumbing and Mechanical Codes could be adopted on a date different from the Building Code.

Mr. Shih encouraged committee members to submit comments on the Plumbing and Mechanical codes to Mr. Smith as soon as possible.

Mr. Bate drew attention to the language at the bottom of the first page, pertaining to conflicts of codes. He questioned why the Mechanical Code always prevails in conflicts with the Plumbing Code. Mr. Shields gave an example of a hot water installation in a hospital.

New Business

 Mr. Conrad reported that since the early 1990's, DSA has been charged with acceptance of manufactured earthquake bracing systems for residential water heaters. DSA's website currently provides some generic information on installation of hot water heater bracing. Mr. Conrad said the staff has been questioning whether this role is appropriate for DSA, given that there are state laws mandating water heater bracing, and ICBO and other agencies have more to do with residential construction.

Mr. Shields stated that the legislation was promulgated by the Seismic Safety Commission, and DSA was identified as the stage agency in the best position to implement the law.

Mr. Conrad suggested that the committee consider including on its next agenda a discussion regarding the appropriateness of DSA's role in manufactured earthquake bracing systems for residential water heaters.

Mr. Shields asked that the staff invite Mr. Henry Reyes, Seismic Safety Commission to the next BSC meeting to discuss this issue.

Mr. Ross asked if DSA has acceptance criteria. Mr. Chip Smith responded that there are acceptance criteria, but no code requirements defining how water heaters are to be braced.

Mr. Smith noted DSA's stakeholder notification mailing list now contains over 300 names, and each entry is identified by category and welcomed input and suggestions regarding the mailing list from committee members.

Mr. Shields observed that a pending appeal deals with a code/building standards item, and he asked how that matter would be handled. Mr. Smith noted DSA issued acceptance criteria regarding waterless urinal fixtures in schools, and the California State Pipe Trades Council appealed issuance of the document. He said the issue seems to be generating a great deal of interest.

Mr. Shields clarified that the appeal process calls for the Executive Director and Chair of the Board select an appeals body to hear an appeal.

Mr. Bate suggested soliciting input on the waterless urinal fixture issue from the Department of Health Services.

Mr. Shields asked if DSA was considering any code modifications in light of this appeal and others. Mr. Smith responded that no changes were underway.

Mr. Smith added that the elevator appeal matter is back in court.

Schedule Next Meeting

Committee members agreed to schedule a meeting after the DSA Advisory Board meeting on June 18, 2004. Mr. Shih suggested that the committee consider meeting again in early July.

Adjournment

There being no further business, Mr. Ross made a that the meeting be adjourned. The motion was seconded by Mr. Shih, and the meeting of the Building Standards Committee was adjourned at 1:15 p.m.

Motions and Follow-Up Items

1. By motion, the committee expressed its concern that state policy, in the form of draft NFPA provisions, are being developed by a single entity, the consultant firm hired by NFPA, outside the normal consensus process for code development work. The motion was carried unanimously.

2. The next step in the stakeholder review process will be for DSA staff to draft a proposed process for the committee's review and endorsement at the next BSC meeting.

3. By motion, the committee approved the stakeholder review process proposed by DSA staff. The motion was carried unanimously.

4. DSA staff will develop and present a written description of the stakeholder review process to the committee.

5. By initial motion, the committee expressed concern regarding whether DSA will be able to continue allocating sufficient resources to update the current code. The motion was amended by adding "and include adequate support for DSA's policy funds and current activities". The amendment was accepted and the motion was carried unanimously.

- 6. Regarding the 2004 Code Supplement, DSA must have its proposal ready for submittal to the Building Standards Commission by August 2, 2004, with the proposed provisions finalized internally within DSA by mid-June.
- 7. Mr. Smith invited the Advisory Board's assistance in terms of recommendations or suggestions for code updates, providing a forum for stakeholder input to proposals, and providing a recommendation to the State Architect. He welcomed comments from the committee.
- 8. Staff anticipates having DSA's proposed 2004 Code Supplement document developed prior to June 1, and it was recommended that a public meeting be held prior to July 2004 if possible.
- 9. Mr. Ross proposed that he and Mr. Dyson meet with DSA Regional Managers to develop a proposal that would satisfy safety concerns regarding glu lams that would potentially reduce fiscal impacts and remain cost-effective.
- 10. Committee members were invited to submit their comments and suggestions regarding all issues included in this year's code adoption cycle, noting DSA's submittal will include the package submitted and withdrawn last year with some minor changes.
- 11. Mr. Smith noted that the Plumbing Code package includes continuation of certain peculiar amendments the committee may wish to review and encouraged committee members to review and comment on the proposed language.
- 12. Mr. Shih encouraged committee members to submit their comments on the Plumbing and Mechanical codes to DSA as soon as possible.
- 13. It was suggested that the committee consider adding to its next meeting agenda a discussion regarding the appropriateness of DSA's role in manufactured earthquake bracing systems for residential water heaters.
- 14. Mr. Shields asked that Mr. Henry Reyes, Seismic Safety Commission be invited to the next BSC meeting to discuss the issue (see Item 13).
- 15. It was noted that DSA's stakeholder notification mailing list now contains over 300 names, and each entry is identified by category and welcomed input and suggestions regarding the mailing list from committee members.
- 16. Regarding the issue of waterless urinal fixtures, Mr. Bate suggested soliciting input from the Department of Health Services.
- Mr. Shih suggested that the committee consider meeting again in early July.

Respectfully Submitted,

John Vester Interim Executive Director